

§ 434.301

Zone: a space or group of spaces within a building with any combination of heating, cooling, or lighting requirements sufficiently similar so that desired conditions can be maintained throughout by a single controlling device.

Subpart C—Design Conditions

§ 434.301 Design criteria.

301.1 The following design parameters shall be used for calculations required under subpart D of this part.

301.1.1 *Exterior Design Conditions.* Exterior Design Conditions shall be expressed in accordance with Table 301.1.

TABLE 301.1—EXTERIOR DESIGN CONDITIONS

Winter Design Dry-Bulb (99%).	.....	Degrees F.
Summer Design Dry-Bulb (2.5%).	.....	Degrees F.
Mean Coincident Wet-Bulb (2.5%).	.....	Degrees F.
Degree-Days, Heating (Base 65).	.....	HDD Base 65 °F.
Degree-Days, Cooling (Base 65).	.....	CDD Base 65 °F.
Annual Operating Hours, 8 a.m. to 4 p.m. when 55 °F ≤ T ≤ 69 °F.	.....	Hours.

[The exterior design conditions shall be added to Table 301.1 from the city-specific Shading Coefficient table from appendix A of RS-1 (incorporated by reference, see § 434.701). Copies of specific tables contained in appendix A of RS-1 (incorporated by reference, see § 434.701), can be obtained from the Energy Code for Federal Commercial Buildings, Docket No. EE-RM-79-112-C, EE-43, Office of Building Research and Standards, U.S. Department of Energy, Room 1J-018, 1000 Independence Avenue, SW., Washington, DC 20585, (202) 586-9127. Adjustments may be made to reflect local climates which differ from the tabulated temperatures or local weather experience as determined by the building official. Where local building site climatic data are not available, climate data from a nearby location included in RS-1, appendix C, (incorporated by reference, see § 434.701) and RS-4 Chapter 24, Table 1, (incorporated by reference, see § 434.701) shall be used as determined by the building official.]

301.2 *Indoor Design Conditions.* Indoor design temperature and humidity conditions shall be in accordance with the comfort criteria in RS-2 (incorporated by reference, see § 434.701), except that humidification and dehumidification are not required.

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Subpart D—Building Design Requirements—Electric Systems and Equipment

§ 434.401 Electrical power and lighting systems.

Electrical power and lighting systems, other than those systems or portions thereof required for emergency use only, shall meet these requirements.

401.1 *Electrical Distribution Systems.*

401.1.1 *Check Metering.* Single-tenant buildings with a service over 250 kVA and tenant spaces with a connected load over 100 kVA in multiple-tenant buildings shall have provisions for check metering of electrical consumption. The electrical power feeders for which provision for check metering is required shall be subdivided as follows:

401.1.1.1 Lighting and receptacle outlets

401.1.1.2 HVAC systems and equipment

401.1.1.3 Service water heating (SWH), elevators, and special occupant equipment or systems of more than 20 kW.

401.1.1.4 Exception to 401.1.1.1 through 401.1.1.3: 10 percent or less of the loads on a feeder may be from another usage or category.

401.1.2 Tenant-shared HVAC and service hot water systems in multiple tenant buildings shall have provision to be separately check metered.

401.1.3 Subdivided feeders shall contain provisions for portable or permanent check metering. The minimum acceptable arrangement for compliance shall provide a safe method for access by qualified persons to the enclosures through which feeder conductors pass and provide sufficient space to attach clamp-on or split core current transformers. These enclosures may be separate compartments or combined spaces with electrical cabinets serving another function. Dedicated enclosures so furnished shall be identified as to measuring function available.

401.1.4 *Electrical Schematic.* The person responsible for installing the electrical distribution system shall provide the Federal building manager a single-line diagram of the record drawing for the electrical distribution system, which includes the location of check metering access, schematic diagrams of non-